

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-18 are allowed.
2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kamei et al.	U.S. Patent 5,640,174
Sato et al.	U.S. Patent 5,751,267
Matsueda et al.	U.S. Patent 6,384,806
Nakanishi et al.	U.S. Patent 6,570,549
Miyajima et al.	U.S. Patent 7,002,543
Kudo et al.	U.S. Patent 7,023,458
Shigeta	U.S. Patent 7,079,129
Kudo et al.	U.S. Patent 7,193,637
Ozaki	USPGPUB 2003/001553
Yamano et al.	USPGPUB 2004/0066363
Ogawa et al.	USPGPUB 2004/0164943
Kudo et al.	USPGPUB 2006/0033695
Huang et al.	USPGPUB 2006/0164687
Kumagai et al.	USPGPUB 2007/0002188

3. The following is an examiner's statement of reasons for allowance: As to Claim 1, the above cited references have failed to teach or suggest, either alone or in combination the following limitations:

"(a) the average value of the positive-side gray scale voltage and the negative- side gray scale voltage is increased when a signal amplitude of the video signal falls in a range from a minimum value to a first value,

(b) the average value of the positive-side gray scale voltage and the negative- side gray scale voltage is decreased when the signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) the average value of the positive-side gray scale voltage and the negative- side gray scale voltage is increased when the signal amplitude of the video signal falls in a range from the second value to a maximum value."

As to Claim 7, the above cited references have failed to teach or suggest, either alone or in combination the following limitations:

"(a) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is increased when a display gray scale of the video signal falls in a range from a minimum value to a first value,

(b) the average value of the positive-side gray scale voltage and the negative-side gray scale voltage is decreased when a signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) the average value of the positive-side gray scale voltage and the negative- side gray

scale voltage is increased when the display gray scale of the video signal falls in a range from the second value to a maximum value.”

As to **Claim 18**, the above cited references have failed to teach or suggest, either alone or in combination the following limitations:

“ (a) increasing an average value of the positive-side gray scale voltage and the negative-side gray scale voltage when a signal amplitude of the video signal falls in a range from a minimum value to a first value,

(b) decreasing the average value of the positive-side gray scale voltage and the negative-side gray scale voltage when the signal amplitude of the video signal falls in a range from the first value to a second value, and

(c) increasing the average value of the positive-side gray scale voltage and the negative-side gray scale voltage when the signal amplitude of the video signal falls in a range from the second value to a maximum value.”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Amadiz whose telephone number is (571) 272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 2629
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5/29/08